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| APPLICATION NO.        | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|------------------------|-----------------|----------------------|-------------------------|------------------|
| 10/664,962             | 09/22/2003      | Shunpei Yamazaki     | 0756-7199               | 4946             |
| 31780                  | 7590 11/15/2005 |                      | EXAMINER                |                  |
| ERIC ROBINSON          |                 |                      | NGUYEN, TUAN H          |                  |
| PMB 955<br>21010 SOUTH | IBANK ST.       |                      | ART UNIT                | PAPER NUMBER     |
|                        | ALLS, VA 20165  | •                    | 2813                    |                  |
|                        |                 |                      | DATE MAILED: 11/15/2003 | 5                |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)   |
|--|--|--|
|  | 10/664,962   | YAMAZAKI ET AL.  |
| Office Action Summary  | Examiner   | Art Unit   |
|  | Tuan H. Nguyen   | 2813   |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c   | orrespondence address  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 66(a). In no event, however, may a reply be time fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |
| Status   |  |  |
| 1)   | action is non-final.  Ice except for formal matters, pro   |  |
| Disposition of Claims  |  |  |
| <ul> <li>4)  Claim(s) 1-41 and 50-67 is/are pending in the adaptive day of the above claim(s) is/are withdraw 5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-41 and 50-67 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or</li> </ul>  | vn from consideration.   |  |
| Application Papers   |  | • •  |
| 9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examiner 11.   | epted or b) objected to by the large drawing(s) be held in abeyance. See on is required if the drawing(s) is objected to by  | e 37 CFR 1.85(a).<br>jected to. See 37 CFR 1.121(d).                       |
| Priority under 35 U.S.C. § 119   |  | •  |
| 12) Acknowledgment is made of a claim for foreign  a) All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior application from the International Bureau  * See the attached detailed Office action for a list of   | s have been received. s have been received in Applicati ity documents have been receive (PCT Rule 17.2(a)).  | on No ed in this National Stage  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 8/31/05.  | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:   | •  |

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#### **DETAILED ACTION**

### **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-41, 50-67 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No. 10/659,585. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are both directed to the use of laminated barrier layer and copper film for wiring in semiconductor device.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-41, 50-67 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshimoto.

Yoshimoto, figs. 10-17 and related text in paragraphs [0140]-[0200] teaches the claimed display device including a conductive barrier film 428a; and a wiring 428b containing Cu as its main component over the conductive barrier film 428a, wherein a width of a top surface of the conductive barrier film 428a is not aligned with that of the wiring 428b (fig. 10C, note in paragraph [0147], last two lines for the use of TaN as a barrier film 408 and copper as a wiring film 409).

With respect to claim 2, see fig. 11c wherein insulating film 461 covers top and side surface of the copper wiring 428b.

With respect to claim 3, a conductive film is considered as a lower portion of the conductive barrier film 428a; and the width of copper film 428b is narrower that that of the conductive barrier film 428a.

With respect to claims 4-18, 57-67,the TFT structure as shown in fig. 12 is used in various electro-optical apparatus (see figs. 15-17, paragraphs [0185]-[0200]) which inherently includes signal lines and scan lines formed in matrix to perform a certain function.

With respect to claims 19-32, 52-54, see paragraphs [0146]-[0147].

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With respect to claims 33-41, 55-56, see paragraph [0158].

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Konuma discloses the wiring layer is narrower than that of the barrier layer.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

## Response to Arguments

Applicant's arguments with respect to claims 1-41 have been considered but are most in view of the new ground(s) of rejection.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is 571-272-1694. The examiner can normally be reached on 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead Jr. can be reached on 571-272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan H. Nguyen
Primary Examiner
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